§ 70.23

to protect against unauthorized viewing of classified enrichment equipment, and unauthorized disclosure of classified matter in accordance with the requirements of 10 CFR parts 25 and 95.

(n) A license application that involves the use of special nuclear material in a uranium enrichment facility must include the applicant's provisions for liability insurance.

[21 FR 764, Feb. 3, 1956]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting \$70.22, see the List of CFR Sections Affected in the Finding Aids section of this volume.

§ 70.23 Requirements for the approval of applications.

- (a) An application for a license will be approved if the Commission determines that:
- (1) The special nuclear material is to be used for the conduct of research or development activities of a type specified in section 31 of the Act, ¹ in activities licensed by the Commission under section 103 or 104 of the Act, or for such other uses as the Commission determines to be appropriate to carry out the purposes of the Act;
- (2) The applicant is qualified by reason of training and experience to use the material for the purpose requested in accordance with the regulations in this chapter;
- (3) The applicant's proposed equipment and facilities are adequate to

¹The types of research and development activities specified in section 31 are those relating to:

(1) Nuclear processes;

(2) The theory and production of atomic energy, including processes, materials, and devices related to such production;

(3) Utilization of special nuclear material and radioactive material for medical, biological, agricultural, health or military purposes;

- (4) Utilization of special nuclear material, atomic energy, and radioactive material and processes entailed in the utilization or production of atomic energy or such material for all other purposes, including industrial use, the generation of usable energy, and the demonstration of the practical value of utilization or production facilities for industrial or commercial purposes: and
- (5) The protection of health and the promotion of safety during research and production activities.

protect health and minimize danger to life or property;

- (4) The applicant's proposed procedures to protect health and to minimize danger to life or property are adequate:
- (5) Where the nature of the proposed activities is such as to require consideration by the Commission, that the applicant appears to be financially qualified to engage in the proposed activities in accordance with the regulations in this part;
- (6) Where the applicant is required to submit a summary description of the fundamental material controls provided in his procedures for the control of and accounting for special nuclear material pursuant to \$70.22 (b)(2), the applicant's proposed controls are adequate;
- (7) Where the proposed activity is processing and fuel fabrication, scrap recovery. conversion of uranium hexafluoride, uranium enrichment facility construction and operation, or any other activity which the Commission determines will significantly affect the quality of the environment, the Director of Nuclear Material Safety and Safeguards or his designee, before commencement of construction of the plant or facility in which the activity will be conducted, on the basis of information filed and evaluations made pursuant to subpart A of part 51 of this chapter, has concluded, after weighing the environmental, economic, technical, and other benefits against environmental costs and considering available alternatives, that the action called for is the issuance of the proposed license, with any appropriate conditions to protect environmental values. Commencement of construction prior to this conclusion is grounds for denial to possess and use special nuclear material in the plant or facility. As used in this paragraph, the term 'commencement of construction' means any clearing of land, excavation, or other substantial action that would adversely affect the environment of a site. The term does not mean site exploration, roads necessary for site exploration, borings to determine foundaconditions, or other preconstruction monitoring or testing to establish background information

related to the suitability of the site or the protection of environmental val-

- (8) Where the proposed activity is the operation of a plutonium processing and fuel fabrication plant, construction of the principal structures, systems, and components approved pursuant to paragraph (b) of this section has been completed in accordance with the application;
- (9) Where the applicant is required to submit a plan for physical protection of special nuclear material in transit pursuant to §70.22(g), of this chapter, the applicant's plan is adequate;
- (10) Where the applicant is required to submit a physical security plan pursuant to §70.22(h), the applicant's proposed plan is adequate;
- (11) Where the proposed activity is processing and fuel fabrication, scrap recovery, conversion of uranium hexafluoride, or involves the use of special nuclear material in a uranium enrichment facility, the applicant's proposed emergency plan is adequate.
- (12) Where the proposed activity is use of special nuclear material in a uranium enrichment facility, the applicable provisions of part 140 of this chapter have been satisfied.
- (b) The Commission will approve construction of the principal structures, systems, and components of a plutonium processing and fuel fabrication plant on the basis of information filed pursuant to §70.22(f) when the Commission has determined that the design bases of the principal structures, systems, and components, and the quality assurance program provide reasonable assurance of protection against natural phenomena and the consequences of potential accidents.3 Failure to obtain Commission approval prior to beginning of such construction may be grounds for denial of a license to possess and use special nuclear material in a plutonium processing and fuel fabrication plant.

[36 FR 17574, Sept. 2, 1971, as amended at 37 FR 5749, Mar. 21, 1972; 38 FR 30534, 30538, Nov. 6, 1973; 39 FR 26286, July 18, 1974; 42 FR 17126, Mar. 31, 1977; 43 FR 6924, Feb. 17, 1978; 49 FR 9406, Mar. 12, 1984; 54 FR 14064, Apr. 7, 1989; 57 FR 18392, Apr. 30, 1992]

§ 70.23a Hearing required for uranium enrichment facility.

The Commission will hold a hearing under 10 CFR part 2, subparts A, G, and I, on each application for issuance of a license for construction and operation of a uranium enrichment facility. The Commission will publish public notice of the hearing in the Federal Register at least 30 days before the hearing.

[57 FR 18392, Apr. 30, 1992]

§ 70.24 Criticality accident requirements.

- (a) Each licensee authorized to possess special nuclear material in a quantity exceeding 700 grams of contained uranium-235, 520 grams of uranium-233, 450 grams of plutonium, 1,500 grams of contained uranium-235 if no uranium enriched to more than 4 percent by weight of uranium-235 is present, 450 grams of any combination thereof, or one-half such quantities if massive moderators or reflectors made of graphite, heavy water or beryllium may be present, shall maintain in each area in which such licensed special nuclear material is handled, used, or stored, a monitoring system meeting the requirements of either paragraph (a)(1) or (a)(2), as appropriate, and using gamma- or neutron-sensitive radiation detectors which will energize clearly audible alarm signals if accidental criticality occurs. This section is not intended to require underwater monitoring when special nuclear material is handled or stored beneath water shielding or to require monitoring systems when special nuclear material is being transported when packaged in accordance with the requirements of part 71 of this chapter.
- (1) The monitoring system shall be capable of detecting a criticality that produces an absorbed dose in soft tissue of 20 rads of combined neutron and gamma radiation at an unshielded distance of 2 meters from the reacting material within one minute. Coverage

³The criteria in appendix B of part 50 of this chapter will be used by the Commission in determining the adequacy of the quality assurance program.